

Wisconsin Waste Reduction and Recycling Program

Background information

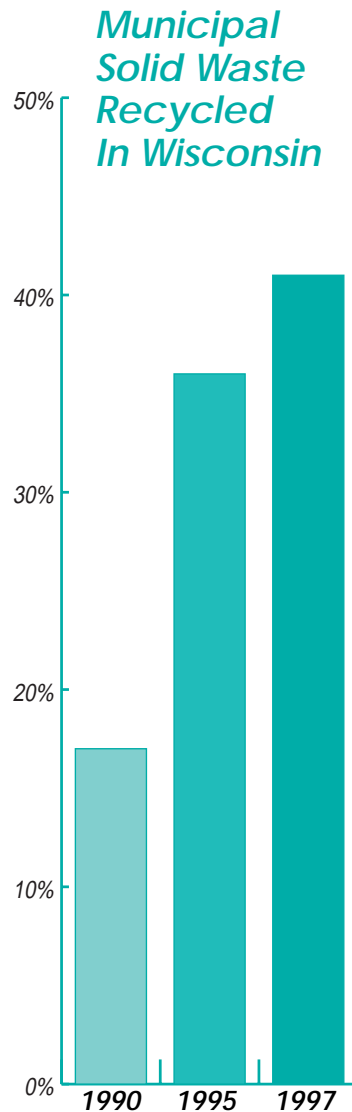
The Solid Waste Reduction, Recovery and Recycling Law was enacted to create new ways to manage solid waste and encourage reduction, reuse and recycling of Wisconsin's solid waste. When the law was passed in 1990, only about 17% of municipal solid waste was recycled; by the end of 2000, five years after the landfill bans and recycling requirements were fully implemented, that percentage had risen to 34%. With the home management of yard wastes and energy recovery added in, that total rises to 41%. Results for 2000, the most recent year for which totals are available, show that nearly 1.6 million tons of waste was being diverted from Wisconsin's landfills every year.

This publication is intended to provide an overview of the original and updated state statutes, now Chapter 287 of Wisconsin State Statutes, and related administrative rules found in Wisconsin Administrative Code, chapters NR 542 to 548. For specific situations, the appropriate statutes and administrative rules should be consulted. This publication also describes related waste reduction regulations that may interest local recycling program coordinators and other local officials.

The policy outlined in the law establishes a hierarchy of preferences for solid waste management options. Those options in the statutes, ranked from most preferred to least, are:

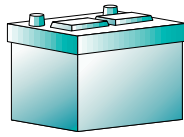
- ✓ Reduction of the amount of solid waste generated.
- ✓ Reuse of solid waste.
- ✓ Recycling of solid waste.
- ✓ Composting of solid waste.
- ✓ Recovery of energy from solid waste.
- ✓ Land disposal of solid waste.
- ✓ Burning of solid waste without energy recovery.

The law also instituted a graduated series of bans on landfilling and incineration of certain materials that went into effect at the beginning of January 1991, 1993 and 1995, respectively. There are, however, some exceptions.



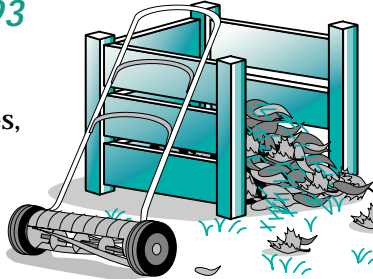
Banned in 1991

- ☞ Lead acid batteries.
- ☞ Major appliances (air conditioners, clothes washers and dryers, dishwashers, refrigerators, freezers, stoves, ovens, dehumidifiers, furnaces, boilers or water heaters). Microwave ovens may be landfilled only if the capacitor has been removed.
- ☞ Waste oil, except when it is incinerated with energy recovery.



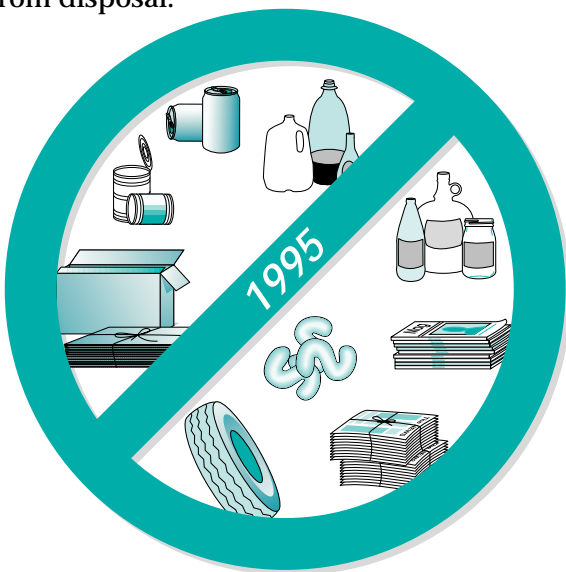
Banned in 1993

- ☞ Yard waste, including grass clippings, leaves, yard and garden debris, and brush under six inches in diameter. Yard waste can go to an approved compost facility or be incinerated with energy recovery. Brush may be burned at licensed woodburning facilities if reasonable alternatives are not available.



Banned in 1995

- ☞ Aluminum containers.
- ☞ Corrugated paper or other containerboard.
- ☞ Plastic containers #1 through #7. Currently, a variance issued by the DNR allows plastic containers #3 through # 7 to be landfilled or incinerated. If, at some future time, the DNR determines that adequate markets for these plastics exist, they will be banned from disposal.



- ☞ Foam polystyrene packaging, either designed for serving food or beverages, loose particles intended for packing (peanuts), or rigid materials shaped to hold and cushion a packaged article. Currently, foam polystyrene packaging can be landfilled or incinerated under the same variance that applies to #3 through #7 plastic containers.
- ☞ Glass containers.
- ☞ Magazines and other materials printed on similar paper.
- ☞ Newspapers and other materials printed on newsprint.
- ☞ Office paper.
- ☞ Steel containers.
- ☞ Containers made from a combination of steel and aluminum (bi-metal cans).
- ☞ Waste tires, except when incinerated with energy recovery.

Exceptions

- ☞ The 1995 bans do not apply to residuals of the banned materials being collected, treated and disposed of by a responsible unit (RU) with an effective recycling program. Even a good recycling program will not capture 100% of all potential recyclables, and some materials become unrecyclable through use or contamination. Examples would be plastic jugs used for waste oil collection or newspaper used for cleaning. There are also exceptions for emergencies, unintentionally contaminated materials, the approved beneficial reuse of a material within a landfill and certain plastics, if recycling is not feasible.
- ☞ RUs within the two grandfathered incinerator service areas are required by the state statute to recycle only steel and aluminum cans, and glass containers. One incinerator is located in La Crosse County and the other in Barron County. Many RUs in these two service areas have local ordinances that also require recycling of paper and plastic items and the local RU in those areas can provide its specific requirements.
- ☞ More information regarding the exceptions can be found in section 287.07 of Wisconsin State Statutes or by contacting a DNR Regional waste management specialist.

Changes through waste reduction, reuse and recycling

In 2001, the DNR commissioned a report that analyzed and characterized recycling in Wisconsin based on 2000 data. One of the functions of the report was to look at a breakdown of the categories of banned materials to see how the law changed disposal habits. In a number of significant categories, the percentage of material recovered for recycling was over 50%, which reflects the effectiveness of the program. For example:

- ✓ >95% of vehicle batteries were recovered.
- ✓ 72% of corrugated cardboard was recovered.
- ✓ 67% of the newsprint was recovered.

- ✓ ~60% of glass containers were recovered.
- ✓ 55% of aluminum cans were recovered.

- ✓ 54% of steel cans were recovered.

These categories alone accounted for almost 850,000 tons of waste diverted from disposal in landfills in 2000. The remaining categories and yard waste collected in municipal facilities added 400,000 tons and household yard waste composting, and energy recovery another 330,000 tons, bringing the overall diverted total to 1,580,000 tons.

The DNR role

The DNR administers and oversees the disposal bans and effective recycling program requirements and has shared responsibility with local units of government to enforce those provisions. The DNR is authorized to issue citations to and collect forfeitures from individuals and companies that violate the provisions enforced by DNR. In general, however, the DNR's implementation of the recycling law emphasizes achieving voluntary compliance through education and technical and financial assistance.



State statutes are available in book form at public libraries, municipal and county offices and courthouses. They can also be accessed on the Internet at: <http://www.legis.state.wi.us/rsb/stats.html>. Copies of Natural Resources Administrative Code are available for viewing at DNR offices and may also be purchased from the state's Document Sales service. Printed copies of Administrative Code can also be found at many public libraries, municipal and county offices and courthouses. Administrative Code can also be found on the Internet at: <http://www.legis.state.wi.us/rsb/code/>

Responsible units

The statutes establish responsibilities for local governments relating to recycling. Local units of government with these responsibilities are called responsible units or RUs. A responsible unit is a municipality, county, Indian tribe, solid waste management system or other unit of local government that is responsible for planning, operating and funding a recycling program. Each RU must develop and implement a recycling program to manage the banned materials generated within its region in compliance with the law and Wisconsin's solid waste management priorities.

A responsible unit is also charged with educating its residents and businesses about the recycling law. An on-going educational campaign that reminds residents and businesses about local recycling programs is essential for maintaining high recycling rates in communities.

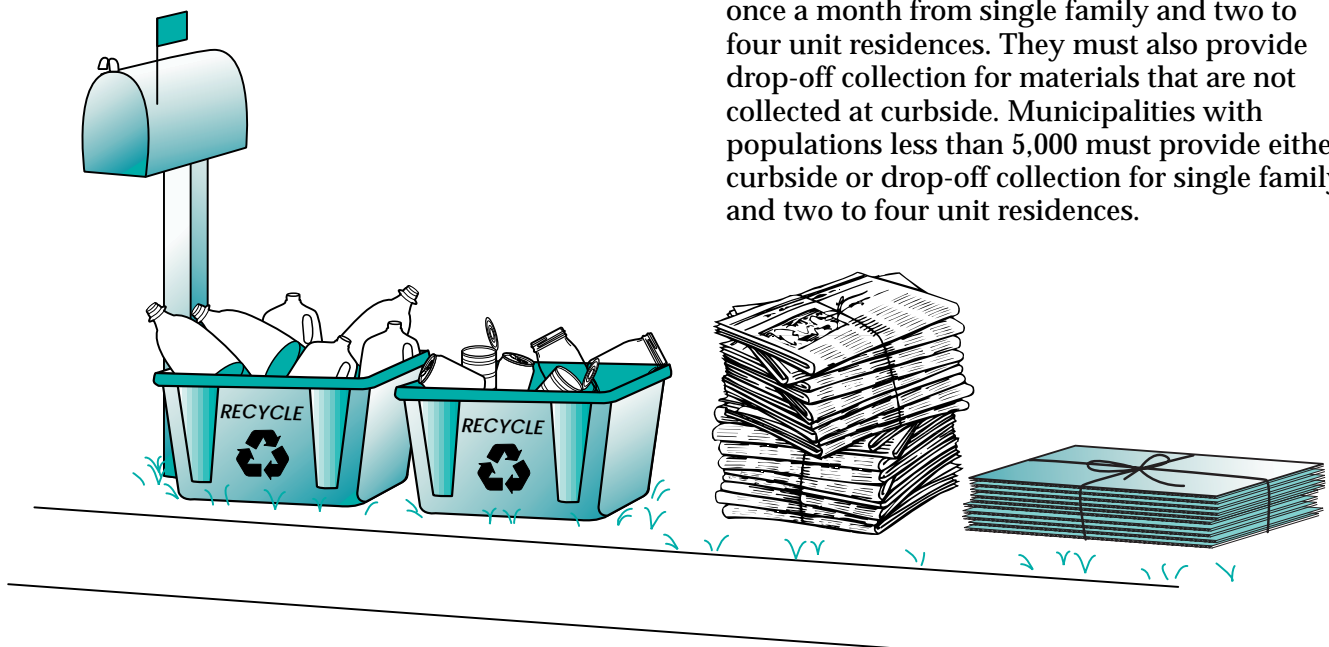
Effective recycling programs

Each RU in Wisconsin is required to maintain an effective recycling program, as defined in state statutes. The designation of an effective recycling program is significant because it determines a local government's ability to landfill or incinerate municipal solid waste in Wisconsin and its eligibility for state recycling grant funds. If a responsible unit does not maintain an effective recycling program, no individual, business or institution within that jurisdiction can legally dispose of municipal solid waste in Wisconsin. Currently, all of the RUs in Wisconsin have approved effective recycling programs. RUs are also required to report annually to the DNR on their recycling program, including the amounts of material collected.

The criteria for an effective recycling program for managing the materials banned in 1995 are:

1. A public education component to inform the RU's residents of the reasons to recycle, local opportunities to recycle and the materials that are banned from landfills and incineration.
2. A requirement that the occupants of residential, commercial, retail, industrial and governmental buildings either separate materials banned from landfills or incineration from postconsumer wastes or treat these wastes at a processing facility that will recover those materials.
3. A requirement that the owners of buildings containing five or more dwelling units provide adequate, separate containers for recyclables, notify tenants of the recycling program and provide for the collection and recycling of the materials.
4. A requirement that owners of commercial, retail, industrial and governmental facilities provide adequate, separate containers for recyclables, regularly notify all users and occupants of the facilities about the recycling programs and provide for the collection and delivery of recyclable materials to a recycling facility.
5. A system for collecting separated recyclable materials from single family residences.
6. A system for the processing and marketing of recyclable materials collected by the responsible unit or by municipalities located in the responsible unit.
7. A prohibition on disposing of recyclable materials in a landfill or incinerator.
8. Provisions for the management of waste that is not separated for recycling or recovery that is consistent with the preferred solid waste management options outlined in the law.
9. Other provisions as established by the department by rule.
10. Adequate enforcement of the above components.
11. Equipment or means necessary to implement the public education, separation, single-family residence collection, marketing and enforcement components described above.
12. A reasonable effort through the program components described above to reduce, as much as possible, the amount by weight of each material included in the 1995 bans that is generated within the RU and disposed of in a landfill, converted to fuel or burned without energy recovery.

In addition, administrative rules require that municipalities with populations of 5,000 or more must provide curbside collection of newspaper, glass, aluminum and steel containers, #1 and #2 plastic containers, and either corrugated paper or magazines, at least once a month from single family and two to four unit residences. They must also provide drop-off collection for materials that are not collected at curbside. Municipalities with populations less than 5,000 must provide either curbside or drop-off collection for single family and two to four unit residences.



Financial assistance for responsible units.

The municipal and county recycling grant program, administered by the DNR, provides financial assistance to responsible units for eligible recycling expenses. To receive a grant, a RU must estimate and then be able to document their operating and equipment expenses, maintain an effective recycling program and file a complete application by October 1 of the year preceding the grant award. Applications filed between October 1 and October 30 are eligible, but receive funding at a reduced rate. Applications submitted after October 30 will not receive a grant. Responsible units are not required to apply for the grant program; however, RUs representing over 99% of the state's population currently receive grants.

Since July 1, 1990, slightly over \$250 million in municipal and county recycling grants has been distributed to RUs. The majority of this funding came from a business recycling surcharge. For 2001, the legislature has allocated \$24.5 million for recycling grants. The grants program is partially funded with a \$.30/ton recycling tipping fee that went into effect on January 1, 2000. The tipping fee is assessed quarterly on all municipal solid waste disposed of in Wisconsin landfills. There is also a business recycling surcharge that applies only to non-farm businesses with more than \$4 million in gross receipts. The recycling surcharge is 3% of gross tax liability for corporations or 0.2% of net business income for non-farm sole proprietorships, partnerships, limited liability companies taxable as partnerships and S-corporations. The maximum surcharge payment is \$9,800. Farms with gross receipts over \$1 million pay a \$25 minimum payment.



Waste Reduction and Recycling Demonstration Grant program

The Waste Reduction and Recycling Demonstration Grant program, administered by the DNR, provides \$500,000 each year to fund waste reduction, reuse and recycling pilot projects. The program provides financial support for demonstration of processes and products that could have an impact on the reduction of solid waste. Under the Request for Proposal component of the program, projects may be funded that, although not innovative, target special and hard-to-recycle wastes. Wisconsin businesses, municipalities, counties, public entities and non-profit organizations are eligible to apply. The maximum grant is \$150,000 or 50% of the total eligible costs of the project, whichever is less. Applicants must match the grant in cash or through in-kind contributions and must provide evidence of having the technical ability to carry out the project.

Recycling Market Development Board

The Recycling Market Development Board (RMDB), attached to the Department of Commerce, is responsible for promoting the development of markets for recovered materials and maximizing the marketability of these materials. The Board has five members, appointed by the Governor. The Secretary of the Department of Commerce or designee chairs the Board, with two representatives from municipalities and two representatives from businesses.

UW-Extension Solid and Hazardous Waste Education Center

The University of Wisconsin-Extension Solid and Hazardous Waste Education Center (SHWEC) was created in 1990 and has offices at UW-Madison, UW-Stevens Point, UW-Green Bay and in Milwaukee. SHWEC provides statewide educational programs and technical assistance related to pollution prevention, recycling and composting for local governments and businesses, working in conjunction with county UW Extension educators.

Council on Recycling

The Council on Recycling (COR) is a citizens group appointed by the Governor to advise the Governor, Legislature, and state agencies on solid waste reduction, recovery and recycling policy. The Council is attached to the Department of Natural Resources (DNR) for limited purposes and is administered by the DNR. Current membership includes individuals representing industry, business and local units of government.

Household Hazardous Waste Clean Sweep program

The Household Hazardous Waste Clean Sweep program, administered by the DNR, provides grants, awarded on a competitive basis, to municipalities that collect and transport household hazardous materials to a licensed hazardous waste facility.



Agricultural Clean Sweep program

The Agricultural Clean Sweep program, administered by the Department of Agriculture, Trade and Consumer Protection (DATCP), provides competitive cost-sharing funds to counties to provide hazardous waste collection from farmers, businesses, schools and government agencies. The program is free to farmers and at a reduced price to other eligible users. Since 1990, the Agricultural Clean Sweep program has collected over 1.2 million pounds of pesticides, waste chemicals and other hazardous waste.

Government purchase of recycled products

The Department of Administration (DOA) is responsible for establishing guidelines for state and local agencies regarding statewide procurement specifications for recycled content in products, purchasing requirements and separation and collection of recyclable materials from government offices.

Newspaper recycled content

Printers and publishers of newspapers and shopper's guides that are printed on newsprint are required to use newsprint that annually averages a mandated amount of post-consumer recycled



content. Starting in 1992, the mandated level was at 10%. Currently, the level is at 33%; in 2001 and 2002, it rises to 37% and in 2003 and beyond, it is 40%. Since its introduction, this program has been very successful, with the average recycled content rising from 23.4% in 1992 to 41.9% in 1998.

Product labeling requirements

The Department of Agriculture, Trade and Consumer Protection (DATCP) has set standards that are largely consistent with nationwide industry standards on the content of products labeled recycled, recyclable or degradable. Labeling or representing a product in violation of these standards is subject to a fine. DATCP also administers a rule that establishes labeling requirements for plastic containers. Accurate labeling provides information needed by operators of recycling programs to facilitate recycling or reuse of the containers.

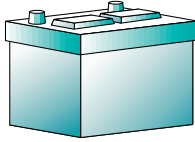
Waste oil collection and recycling

Any business that sells automotive engine oil is required to either maintain a used oil collection center or post a sign informing customers of the nearest approved waste oil collection facility. If adequate, approved waste oil collection facilities are not available, local or county governments are obligated to provide them.



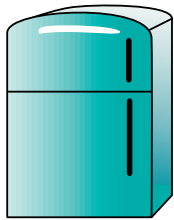
Lead acid and mercuric oxide batteries

Since 1990, retailers of lead acid automotive batteries are required to accept a used battery in exchange for each new battery sold. A retailer may charge a deposit of up to \$5 when a customer buys a new battery without turning in a used one. Retailers are also required to accept used batteries when a customer has not purchased a new one. Retailers may charge up to \$3 for each battery accepted and can refuse to accept more than two batteries a day from any one customer.



Waste mercuric oxide batteries must be disposed of at an authorized collection site and the collection site must recycle all batteries collected.

Refrigerants



Both state and federal law prohibit the release of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) into the atmosphere. These chemicals, commonly known as Freon, are found in older refrigerators, home and vehicle air conditioners, dehumidifiers, and other cooling systems and equipment. The Department of Agriculture, Trade and Consumer Protection (DATCP) regulates businesses that service vehicle air conditioners and the Department of Commerce regulates those who service stationary equipment such as appliances and commercial cooling units. The DNR has authority over refrigeration equipment being salvaged or hauled for scrap. Salvage operators must register with the DNR, certify that they will not release refrigerants and use DNR approved equipment and properly trained operators.

Recycled road construction materials

The Department of Transportation (DOT) is required to use or attempt to use the maximum amount possible of recovered materials in DOT administered construction projects. The materials include glass, wastepaper, pavement, pottery cull, recycled plastics, high volume industrial waste such as



fly ash, bottom ash, paper mill sludge, or foundry waste, or any other waste with similar characteristics that is approved by the DNR. These materials can be used for surfacing material, structural material, landscaping materials and fill for all highway and other transportation system improvements.

Recycling storage requirements

The Department of Commerce's commercial building code requires that building owners provide adequate space inside or adjacent to a public building for the separation, temporary storage and collection of materials subject to the landfill bans. This code applies to newly constructed public buildings, additions that increase the size of a public building more than 50%, or alterations of 50% or more of a public building that is 10,000 square feet or larger.

Composting yard waste and other materials

Household composting of yard waste is encouraged by the DNR and yard waste is generally banned from landfills. Yard waste compost facilities are divided into four categories.



Household composting facilities are those in which single households compost yard waste and food scraps on their own property. No approval or license from the DNR is needed, however the site is expected to be operated in a nuisance free and environmentally sound way. Backyard composting may be regulated by local ordinance.

Neighborhood composting facilities for grass, leaves, yard waste and food scraps which do not exceed a volume of 50 cubic yards of compost at one time need no DNR license or approval, provided the operation is nuisance free and certain performance standards are met. They may also be subject to local ordinances.



Community yard waste compost facilities that handle between 50 and 20,000 cubic yards of material on the site at one time are licensed by the Regional DNR office for that area. These facilities must meet location, performance and reporting requirements set by DNR administrative code. All yard waste compost facilities that exceed 50 cubic yards at one time must be licensed by the department, regardless of when they opened for operation.

Yard waste compost facilities that handle more than 20,000 cubic yards of waste at one time are approved and licensed through the DNR central office and must meet the requirements for such facilities set by DNR administrative code.

On-site farm composting of farm crop residue, manure and animal carcasses utilized for agricultural purposes is also not licensed by the DNR, although specific performance standards and other criteria must be met. Manure from agricultural animal operations may be covered under a DNR wastewater (WPDES) permit.

Landspreading

The landspreading of composted and uncomposted yard waste and composted vegetable food waste does not require DNR approval, provided it is applied as a soil conditioner or fertilizer in accordance with accepted agricultural practices. These landspreading facilities must also be maintained and operated in a safe, nuisance-free manner.

The DNR Watershed Management program regulates facilities used for the disposal of municipal and industrial wastewater treatment sludge. For other landspreading projects, a DNR Regional waste management specialist should be contacted.

Open burning and trash incineration

Where not prohibited by local ordinance, individual homeowners can usually burn small quantities of their own dry, combustible rubbish such as paper, leaves, plant clippings, brush and clean, untreated wood. However, burning leaves and yard waste is discouraged because of the benefits of composting and mulching with these and because burning in general pollutes the air and is a nuisance and a fire hazard. Before burning, it is advisable to contact a local fire authority to find out if a state or local burning permit is needed or if emergency burning restrictions are in effect. Homeowners are always prohibited from burning wet, combustible rubbish, oily substances, asphalt materials, plastic of any kind and rubber products.

Generally, businesses, industries and municipalities need a DNR approval and license to burn waste materials, including clean wood waste or brush.

Littering

It is illegal to deposit or discharge any solid waste on or along any highway, in any waters or on the ice of any waters of the state or on any other public or private property unless it is done in conformance with other state laws. The law also makes it illegal to abandon any automobile, boat, other vehicle or aircraft in the state's waters.

For more information regarding solid waste reduction and recycling, contact the DNR Regional recycling staff listed on the DNR website www.dnr.state.wi.us/org/aw/wm/contacts/recycle.htm



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